HERO Quarterly Update 1, March 2015
Human and Ecological Risk Office (HERO),
California Department of Toxic Substances Control (DTSC)

HERO is pleased to announce "Quarterly Updates from HERO". We plan on sending out a quarterly email with information on important updates for human health risk assessment.

1. Updates to Human Health Risk Assessment (HHRA) Notes 1 and 5. These HHRA Notes are described below with a link to the entire HHRA Note:

HHRA Note 1 – Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Hazardous Waste Sites and Permitting Facilities. This Note provides HERO updates of the following exposure factors: adult body weight, residential exposure duration, adult and child drinking water ingestion rate, adult skin surface area for dermal soil exposure, the bath/showering scenario, and particulate emission factor (PEF). These exposure parameters were updated to be consistent with the February 6, 2014 USEPA memorandum, "Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors.".
http://www.dtsc.ca.gov/AssessingRisk/upload/HHRA_Note1-2.pdf

HHRA Note 5 – Health-based Indoor Air Screening Criteria for Trichloroethylene (TCE). HHRA Note 5 describes how HERO recommends implementation of the TCE Action Levels contained in the EPA Region 9 guidance dated December 3, 2013. Specifically Note 5 discusses: 1) applicability to all sites where vapor intrusion is being evaluated; 2) interim measures; and, 3) response actions.
http://www.dtsc.ca.gov/AssessingRisk/upload/HHRA_Note5-pdf-pdf.pdf

2. Updates to DTSC-modified Johnson and Ettinger (J&E) Model. In December 2014, HERO updated the DTSC Modified Screening-Level Soil Gas and Groundwater J&E Models. The models were first revised in March 2014 to reflect recommendations in the Final DTSC Vapor Intrusion Guidance (2011), provide additional receptor scenarios and incorporate exposure time as a receptor exposure parameter, update toxicity criteria, and add features for user convenience. The models were also revised in December 2014 to incorporate USEPA and DTSC revisions in residential receptor exposure duration and non-cancer averaging time. The revised models can be found at:
http://www.dtsc.ca.gov/assessingrisk/humanrisk2.cfm.

3. California Chromium 6 Maximum Contaminant Level (MCL) for drinking water is 10 µg/L, effective July 1, 2014. More information is available at:
http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Chromium6.shtml.

4. HERO continues to recommend the use of the OEHHA toxicity criteria for tetrachloroethylene (PCE) at DTSC sites. HERO does not recommend using the 2012 IRIS PCE toxicity criteria. Please contact the toxicologist assigned to your site if you have any questions.

5. Lead. HERO recommends using LeadSpread 8, which can be found at http://www.dtsc.ca.gov/assessingrisk/humanrisk2.cfm, when evaluating lead at sites. The soil screening level for the residential scenario is 80 mg/kg as the 95 percent upper confidence limit on the mean (95UCL) and the industrial value is 320 mg/kg.

6. Upcoming updates: HERO is in the process of updating our HHRA Note 3, DTSC Recommended Methodology for Use of U.S. EPA Regional Screening Levels (RSLs) in Human Health Risk Assessment Process at Hazardous Waste Sites and Permitted Facilities.
Please contact your site toxicologist if you have any questions.

Thanks,
HERO

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